# **Accessibility**

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# Plan for today

Web accessibility challenges

Demo: screen reader use and navigation

**Demo: Accessibility examples** 

Both positive and negative...

**Summary of takeaways from demo** 

# **Access challenges**

## Many are not unique to web

## Fonts, colors, styling

Low contrast colors, small text size, hard to read fonts

E.g. contrast checker

#### **Animation, movement**

E.g. text that scrolls by quickly

## **Spacing and layout**

E.g. right-aligned text can be easy to miss

# **Access challenges**

# Some are more specific

## **Navigation challenges**

Assume use of mouse

Overridden keyboard shortcuts

# **Element labeling and identification**

E.g. everything is a div

Some UX (menus, toolbars) don't have HTML elements

# **Takeaways**

#### **Use semantic elements**

Meaning aids navigation, searching

Use CSS to suppress default styles

### Label elements clearly

Images: use alt text

Form controls: use <label>

When setting colors/fonts/etc. in CSS, ensure there is a text description

E.g. don't just mark same text red or green

For general elements, use aria-label

But this is a bit of a "hammer;" prefer more specific techniques

# **Takeaways**

#### **Ensure DOM element ordering makes sense**

E.g. don't put footer as first child of body

Beware when using absolute/fixed position, Flexbox reverse, etc.

#### Manage the user focus

Use . focus () to move focus programmatically

Draw attention to new/changed content, dialogs, etc.

Set tabindex="-1" to make elements focusable via JS

Restrict focus to subset of elements

E.g. when elements aren't interactable (dialogs)

See code on lectures page for example

# **Takeaways**

## Be careful of keyboard and mouse events

- Provide alternatives to drag/hover
- Be careful about overriding standard keyboart shortcuts and behavior

#### **ARIA**

#### **ARIA** defines HTML attributes used by assistive tech

Should still prefer more general techniques (e.g. semantic elements)
But provides more flexibility

## **Examples of ARIA roles**

Allows you to decouple HTML from asstiive tech behavior

Often requires a fair amount of JS to work correctly